

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

PATENT CLAIMS

We claim:

1. (Currently amended) ~~Switching~~ A switching converter, in which an ~~a~~ ~~said~~ input voltage (U_E) can be switched by means of at least one ~~said~~ controlled switch (S) to at least one ~~said~~ primary winding (W_p) of a ~~said~~ transformer (UET), with a ~~said~~ control circuit (AST) for controlling the switch, to which a ~~said~~ regulating signal (S_R) in the sense of the regulation of at least ~~the~~ ~~said~~ an output voltage is sent, wherein ~~the~~ a power supply of the ~~said~~ control circuit (AST) takes place via ~~the~~ a forward voltage of ~~a~~ ~~said~~ an auxiliary winding ($W1$) of the ~~said~~ transformer, a ~~said~~ first rectifier ($D2$), a ~~said~~ capacitor (C) and a ~~said~~ series regulator (LAE), on the one hand, and, on the other hand, starting from the ~~said~~ an input voltage (U_E), via a current path (Rs) and a ~~said~~ storage capacitor (Cs),

~~characterized in that~~ wherein

the off-state voltage of ~~a~~ ~~said~~ the auxiliary winding ($W1$; $W2$), which is rectified by means of a ~~said~~ second rectifier ($D4$) is additionally sent to the ~~said~~ control circuit (AST) for power supply, wherein the ~~said~~ rectified off-state voltage is used to supply the ~~said~~ control circuit during the operation as long as it has a sufficient voltage level.

2. (Currently amended) ~~Switching~~ The switching converter in accordance with claim 1, ~~wherein~~ ~~characterized in that~~ a second ~~another~~ ~~said~~ auxiliary winding ($W2$) of the ~~said~~ transformer (UET) is provided to generate the off-state voltage, the ~~said~~ off-state voltage being used via ~~a~~ ~~said~~ the second rectifier ($D4$) directly to supply the ~~said~~ control circuit (AST).
3. (Currently amended) The switching ~~Switching~~ converter in accordance with claim 1, ~~wherein~~ ~~characterized in that~~ the ~~said~~ forward voltage as well as the ~~said~~ off-state

voltage are taken from ~~a said common~~ the auxiliary winding ($W1$), wherein ~~said first~~ uncoupling/rectifier diodes ($D2$; $D2'$) rectify the ~~said forward~~ voltage and lead to the ~~said~~ series regulator (LAE), and ~~said additional~~ uncoupling/rectifier diodes ($D4$; $D4'$) rectify the ~~said off-state~~ voltage and lead to the ~~said supply~~ voltage terminal of the ~~said control~~ circuit (AST).

4. (Currently amended) Switching converter in accordance with ~~one of the claims 1 through 3~~ claim 1, ~~wherein~~ **characterized in that** the output of the ~~said series~~ regulator (LAE) is connected with the ~~said storage~~ capacitor (Cs) via ~~a said~~ an uncoupling diode ($D3$).
5. (New) The switching converter in accordance with claim 2, wherein the output of the series regulator is connected with the storage capacitor via an uncoupling diode.
6. (New) The switching converter in accordance with claim 3, wherein the output of the series regulator is connected with the storage capacitor via an uncoupling diode.